

6. System as claimed in one of the above claims, characterized in that the closing device (4) when in its open position shall constitute, in particular in the zone (7) constituting the base wall, a chute (7, 9) onto which the caps by their own weight shall drop from the closing device (4).

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7. System as claimed in one of the above claims, characterized in that the blower (5) is a centrifugal blower.

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8. System as claimed in one of the above claims, characterized in that a filter (3) is mounted between the collecting container (2) and the blower (5) and in that said filter preferably exhibits a pore size to achieve a separation rate of about 95 % for particles with a size of 0.2 µm.

9. System as claimed in one of the above claims, characterized in that the filter (3) can be mounted in the form of a filter cartridge at the suction side of the blower (5).

10. A method for operating a system as claimed in one of the above claims, comprising the following steps:

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-- starting the blower (5) to produce a partial vacuum in the collecting container (2),

-- aspirating a number of caps and collecting the caps in the collecting container (2),

where the blower (5) is shut OFF to empty the collecting container (2) and next the closing device (4) is pivoted under the weight of the caps into its open position, the caps dropping from the

closing device (4) which thereupon is pivoted by the counterweight (13) at least almost into its closed position.

11. Method as claimed in claim 10, characterized in that following said  
emptying, the blower (5) again is turned ON and the closing device (4) is forced by the partial  
vacuum into its closed position.

12. System and method as claimed in one of the above claims, characterized in that the system is part of an automated opening apparatus for human or animal fluid samples.

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## ABSTRACT

The invention relates to a suction system for caps of sample containers and comprising a suction duct 1, a partial-vacuum space constituting a collecting container 2, further a blower 5 which when operating produces a partial vacuum in the collecting container 2, said container 2 being fitted at its lower side with a closing device 4.

Fig. 1.